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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,814	10/15/2003	Seok-il Yoon	Q77659	1697

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EXAMINER

SEVER, ANDREW T

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,814

Applicant(s)

YOON ET AL.

Examiner

Andrew T Sever

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☒ Claim(s) 2,3,5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (US 6,088,158), and further in view of Yamaguchi et al. (US 6,665,118.)

Kimura teaches in figure 1A and column 3 a screen for a projector comprising:

A Fresnel lens (12), which concentrates incident light;

A lenticular lens (11) arranged on a front surface of the Fresnel lens and which forms an image by focusing light passing through the Fresnel lens;

A protective panel (13) installed on a front surface of the lenticular lens and which protects the lenticular lens; and

A portion (13b figure 1B) formed on one surface of the protective panel wherein the portion includes a core member capable of being emitted externally. (Column 3 line 65 to column 4 line 5 teaches that when external humidity is decreased the outer layer 13b releases water vapor externally.)

Kimura does not teach that the protective panel includes a reflection-reducing portion, which reduces reflection of light toward a viewer by diffusely reflecting the light.

However the use of a diffusive surface in the protective panel in order to reduce

reflections towards a viewer is well known as is taught by Yamaguchi in figure 8 and in column 18 lines 36-56 that a rear projection screen includes along with a Fresnel lens and lenticular lens a light diffusing sheet having micro particles for diffusing the light. As taught in column 9 lines 10-48 the use of the diffusing sheet having micro particles has many advantages over a projection screen lacking them including having good diffusion characteristic with small wavelength dependency among other things. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the protective panel taught by Kimura a reflection reducing portion as taught by Yamaguchi.

With regards to applicant's claim 4:

Yamaguchi teaches the well known projector mechanism in figure 11 which comprises among other things an image forming apparatus (5), a projection lens (6), and screen (8) which is described above.

Allowable Subject Matter

3. Claims 2, 3, 5, and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The following is a statement of reasons for the indication of allowable subject matter:

The prior art did not teach the diffusive member was made of a plurality of hollow fillers wherein the hollow fillers were filled with the core members that are capable of being emitted externally. Although it is known to make a diffusive members out of hollow fillers, see for example US 3,612,650 to Miyano figure 1, the prior art does not teach those hollow members and the core members which fill them being such that the core member is capable of being emitted externally. Accordingly claims 2, 3, and 5 would be allowed if re-written in independent form including the limitations of the rejected base claims.

With regards to claim 6, the prior art did not teach the core member comprising of medical supplies, an aromatic, oil, or an antibiotic. Accordingly claim 6 would also be allowable if re-written in independent form including the limitations of the rejected base claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 3,609,000 to Miyano et al. teaches a projection screen having microcapsules imbedded within it in figure 1.

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US 6,318,868 to Larussa teaches in figure 6 for example, a display system which sprays scents along with an image.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS

A handwritten signature in black ink, appearing to read 'David Gray', with a large, stylized loop at the end.

David Gray
Primary Examiner